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ABSTRACT

The guide presents a collection of over 200 microcomputer programs appropriate for home education. All software packages have been evaluated by at least two reviewing agencies using the following criteria: (1) emphasis on user control of the learning process; (2) usable by several age groups; (3) usable for remedial purposes as well as first-time learning; (4) usable on computer systems widely available in homes; and (5) good values for the money. The entries are categorized alphabetically by subject, and, where appropriate, by topic. Subject areas are aviation and space travel, business, comprehensive (programs for all subjects), computers, early learning/preschool, English/language arts, fine arts, foreign language, health, home economics, logic/problem solving, mathematics, reading, science, and social studies. A list is included of names, addresses, and telephone numbers of software publishers whose products are described. A glossary of major terms used in the guide is also provided. (GL)

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Parents' Guide to Highly Rated Educational Software

OVER TWO HUNDRED HIGHLY RATED SOFTWARE PROGRAMS FOR HOME EDUCATION

Educational Products Information Exchange Institute

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Parents' Guide to Highly Rated Educational Software

OVER TWO HUNDRED
HIGHLY RATED SOFTWARE PROGRAMS
FOR HOME EDUCATION

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WATER MILL, NEW YORK 11976
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Introduction

This booklet presents a collection of over 200 microcomputer programs appropriate for home education. All of them have been positively evaluated by at least two responsible reviewing agencies, and all sell for reasonable prices. All are available from commercial publishers, distributors, and retailers.

We chose the programs carefully to provide a mix that reflects the broad spectrum of home computer users' needs and wishes. We emphasized balance among subject areas and choose programs which meet as many of the following criteria as possible:

- Have received positive evaluations by many reviewers.
- Emphasize user control of the learning process.
- Usable by several age groups.
- Usable for remedial purposes as well as first-time learning.
- Usable on computer systems widely available in homes.
- Are especially good values for the money.

We recognize that all of these criteria are not met by every program in the list - not many programs could meet them all. But, we feel that this is a very good list with which to get started. Also, we recognize that there are many good products which, because of space limitations, we were unable to include. For information about the entire spectrum of educational software, contact EPIE Institute as described at the end of this section.

How To Use This Booklet

This booklet contains three main sections: a software list, a publisher list, and a glossary. The software list is organized by subject, and within subject by area and topic. These divisions are shown in the Table of Contents. You should locate the subject in which you are interested, and then look for a program which would help teach or learn the topic or concept in which you are interested. Once you find a program which seems suitable, check to see if it is intended for the age level(s) you have in mind. If you are looking for a program for a preschool or kindergarten child and don't find something useful under Early Learning/ Preschool, note that several programs for this age range may be found under subjects such as Reading.

Make sure that a version is available for the type of computer that you have. If you find terminology in a program description which you don't understand, refer to the Glossary (page 22) for help. Write down the name of the company who publishes the program.

Once you have found one or more programs, refer to Section III., Publishers. There you will find the addresses and telephone numbers of all the companies who publish the products we have listed. You can use that information to contact the companies.

However, before you actually place an order, we strongly suggest that you contact any local agencies who might provide an opportunity to preview the products you have chosen. A good bet might be your local school system (ask for the Computer Coordinator), a college or university library, or a computer store - especially one who caters to schools (ask the Computer Coordinator about this too). Obviously, the reason for this caution is that you should be satisfied that the programs you have chosen will do what you want before you shell out $50 or more apiece with nothing more to go on than a short description. Publishers often extend moneyback guarantees to schools, but individual consumers will experience a good deal of trouble getting that sort of deal.

And that brings up another thing to do before you rush off and order programs from the publishers. Some school districts have established very progressive home-school software purchasing programs. These programs enable the home educator, at the very least, to get the benefits of publisher preview policies. Sometimes they even enable the home user to take advantage of quite substantial educational discounts on their purchases. Again, give your local school Computer Coordinator a call. If your school doesn't have such a program, maybe you should ask the principal why not. It is an ideal way for the school district to promote good school-parent relations. Also, it often affords an opportunity for teachers to reinforce computer-oriented learning taking place in the school by encouraging it to continue at home.

If you contact a publisher directly, try to find out if the company can give you the name of a retailer in your area who carries the company's products. Such a store may offer previews, or at least let you take a look at the user's guide for the program. Also, a local computer store may extend a warranty (sometimes informal) to you, especially if you are a regular customer, where the publisher would not.

Where To Get More Information

It is possible, after you have used this booklet for a while, that you may feel the need for more information than is given here. You may want descriptions of educational software not included here, or you may want more information about what is included. When and if that time rolls around, you may want to contact EPIE, either for yourself or on behalf of your local school or library.

All of the information contained here comes from EPIE's educational software database, which contains descriptions of over 10,000 programs produced by more than 800 publishers. Each of those 10,000 entries contains complete descriptions, detailed hardware requirements, citations to reviews of the software, and so forth. The database also contains EPIE's in-depth evaluations of many of the products. It is used to produce a variety of printed and electronic products, including a very large book, *TESS - The Educational Software Selector*, and a searchable database available to schools and libraries. The newest publication to be done from the database is the 360-page *1988 Supplement to TESS*, which will be available in early 1988. It will describe about 2,900 of the newest educational programs on the market, as well as 300 of the most highly rated of those produced before 1986. At a price of $32.95, it should be within the budgets of some home educators. If that is not true in your case, perhaps you could interest your local school or public library in the idea of buying a copy to which you and other home educators could have access. To obtain more information about EPIE products, contact us at: EPIE Institute, P.O. Box 839, Water Mill, NY 11976. Tel: (516) 283-4922.

Who Is EPIE Institute?

Founded in 1967, EPIE Institute is education's only non-profit, independent consumers union. Affiliated in the past with Consumers Union of the U.S., publishers of *Consumer Reports*, EPIE shares the Consumers Union philosophy of providing totally independent and unbiased information to its customers. The goal of each EPIE product and service is to maximize educators' hard-won budget dollars by promoting fully informed buying decisions for technical and fast-changing educational products.

EPIE has earned the trust of education by strictly maintaining its independence. It is supported in part by subscriptions from individuals, schools, libraries, and state departments of education. Vital support for research also comes from private foundation grants. EPIE accepts no support from the producers of the products it evaluates. Its publications contain no advertising. All of these things make EPIE uniquely qualified to provide the most objective, critical, and trusted consumer information possible.

The following names are used throughout this booklet and are the registered trademarks of the companies indicated:
Apple Computer Co.: Apple II, Macintosh.
Atari, Inc.: Atari 400, 800, and 1200.
Commodore Business Machines: Commodore 64, Amiga, PET.
International Business Machines: IBM PC.
Tandy Corp.: Radio Shack TRS-80 Models I, III, and IV, Color Computer.

Software

This section contains descriptions of over 200 highly rated programs suitable for home education. The entries are categorized by subject, and also by topic if appropriate.

The subjects are organized alphabetically; a complete list is given in the table of contents. Definitions of some frequently used terms are given in the Glossary. In the software descriptions below, these abbreviations are used for the names of the computer families indicated: Atari 4/8/12 (Atari 400, 800, and 1200); TRS-80 1/3/4 (Radio Shack TRS-80 Models I, II, and III).

Aviation & Space Travel

GLIDEPATH (Ages: 12-18)
System: Apple II
Availability: HRM Software, $69
Description: Simulation, concept development. Simulates flight of glider over imaginary terrain that includes mountains, forest, and desert. Introduces basic principles of flight physics (i.e., lift, stall, velocity, flight path, etc.)

RENDEZVOUS (Ages: 15-Adult)
System: Apple II
Availability: EduWare Services, $39.95
Description: Space shuttle flight simulation from Earth liftoff through orbital rendezvous and approaching docking.

Business

VIDEO GALLERY SALES AND SERVICE (Accounting/Bookkeeping, Ages: 16-Adult)
Systems: Apple II, TRS-80 1/3/4, IBM PC & Compatibles, Other
Availability: South-Western Publishing Co., $42.50
Description: Simulation, concept demonstration. Learner uses computer to process transactions which involve purchases, sales on account, correction and adjustment of entries, sales discounts, credit terms, and purchase disbursements.

MATH SHOP (Business Math, Ages: 12-15)
System: Apple II
Availability: Scholastic, Inc., $69.95
Description: Simulation, concept demonstration. From bakery to grocery, user helps perplexed proprietors to reach decisions about inventory, cash flow, special sales, etc. Users read word problem in simulated setting.

Business (cont)

RUN FOR THE MONEY (Business Principles, Ages: 8-Adult) Systems: Apple II, Macintosh, Atari 4/8/12, Commodore 64
Availability: Mindscape, Inc., $49.95
Description: Skills practice, educational game. Two persons can play simultaneously. Based on economic models prepared by an MIT professor; includes fast action, graphics, action, and an in-depth scenario.

CARTELS & CUTTHROATS (Business Principles, Ages: 15-Adult) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Strategic Simulations Inc., $39.95
Description: Educational game. One-to-six player strategy game designed to tax the user's business sense by putting him/her in charge of a multi-million-dollar manufacturing plant.

BARON (Investments, Ages: 11-18) Systems: Apple II, Macintosh, Commodore 64, IBM PC &Compatibles
Availability: Blue Chip Software, $49.95
Description: Educational game, concept development. Real estate simulation. Helps user learn ins and outs of investing in commercial, residential or undeveloped property.

MASTERTYPE (Typing, Ages: 8-Adult)
Systems: Apple II, Macintosh, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: Mindscape, Inc., $39.95
Description: Skills practice, educational game. Typing instruction in game format. The user zaps the enemy word by typing it correctly or the word zaps the user. Eighteen progressive lessons.

TYPING TUTOR AND WORD INVADERS
(Typing, Ages: 9-18)
Systems: Apple II, IBM PC & Compatibles, Other
Availability: Academy Software, $24.95
Description: Skills practice, educational game. Teaches the keys in the proper progression. Automatically advances to new keys in gradual steps as skills develop. Mistakes are identified and typing speed is indicated.

TYPING WELL
(Typing, Ages: 9-Adult) System: Apple II
Availability: Learning Well, $49.95
Description: Rote drill, skills practice. Five games give learners a chance to build touch typing competence and speed. Words per minute speeds can be adjusted for each player so that the program challenges but is not discouraging.

SUPERKEY-PERSONAL KEYBOARDING
(Typing, Ages: 9-Adult) System: Apple II
Availability: Bytes of Learning Inc., $59.95
Description: Skills practice, tutorial. Provides basic keyboarding instruction through self-paced tutorials and practice modules. Stresses importance of good posture and proper technique.

Comprehensive - Programs For All Subject Areas

BARRON'S COMPUTERIZED STUDY FOR THE SAT (Aptitude Test Preparation, Ages: 15-18) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Barron's Educational Series, $89.95
Description: Skills practice, tutorial. Covers: analogies, sentence completion, reading comprehension, standard written English, algebra, inequalities, fractions, decimals/percents, averages/motion, ratio/proportion, geometry, and much more.

COMPUTER PREPARATION FOR THE SAT
(Aptitude Test Preparation, Ages: 15-18)
System: Apple II
Availability: Coronado Publishers, Inc., $87.95
Description: Skills practice, simulation. Analyzes actual SAT test results from practice exams, prepares a personalized study plan, and times and scores automatically; includes extensive practice drill banks and vocabulary flashcards.

COMPUTER PREPARATION FOR THE SAT
(Aptitude Test Preparation, Ages: 15-18)
Systems: Apple II, Atari 4/8/12, Commodore 64, TRS-80 1/3/4, IBM PC & Compatibles
Availability: Harcourt Brace Jovanovich, $79.95
Description: Skills practice, tutorial. Is a software-integrated study program to help user prepare for the SAT. Sample material developed from previous tests is practiced at individual pace with immediate feedback.

FRIENDLY FILER™ (Database Managers, Ages: 9-Adult) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Grolier Electronic Publishing, $49.95
Description: Skills practice, tool program. Self-instructional introductory database manager which helps user learn the intricacies and theory of database management by searching for answers in a built-in practice database.

BANK STREET SCHOOL FILER
(Database Managers, Ages: 11-18)
Systems: Apple II, Commodore 64, Other
Availability: Sunburst Communications, $99
Description: Database retrieval, concept development. Designed especially to help the users learn about databases. Features built-in reporting capabilities, simple English language commands, and continual on-screen prompts. Information included on data disks is correlated to suggested activities.

EASY GRAPH II™
(Graphers & Plotters, Ages: 9-15) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Grolier Electronic Publishing, $59.95
Description: Tutorial, tool program. Helps learn how to read, interpret, and create graphs. Creates and prints bar graphs, pie charts, and pictographs. Uses a fill-in-the-blanks approach.

THE NEWSROOM
(Miscellaneous Tools, Ages: 9-Adult) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Springboard Software, Inc., $59.95
Description: Tool program. Lets learner design, produce, and print newsletter for club, class, or school, complete with text, pictures, banners, and headlines.

THE PRINT SHOP
(Miscellaneous Tools, Ages: 9-Adult)
Systems: Apple II, Atari 4/8/12, Commodore 64
Availability: Broderbund Software, $79.95
Description: Tool program. Enables users to create and print greeting cards, posters, letterheads, and banners. Wide selection of predefined images, type styles, and borders are available.

Comprehensive (cont)

EDUCALC™
(Spreadsheets, Ages: 11-Adult) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Grolier Electronic Publishing, $59.95
Description: Tutorial, tool program. Designed to help user understand and use an electronic spreadsheet for a variety of applications such as population comparisons, science lab, budgeting, and scheduling.

BANK STREET WRITER III
(Word Processors, Ages: 8-Adult)
Systems: Apple II, IBM PC & Compatibles
Availability: Scholastic, Inc., $79.95
Description: Word processor designed especially for the young writer; emphasizes ease of use. Includes 60,000-word spelling checker, on-line thesaurus, interactive tutorial, and manual with learning activities.

CUT AND PASTE™ (Word Processors, Ages: 10-18) Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: Electronic Arts, $14.95
Description: Word processing package easy enough for young learners and powerful enough for the writing and composing needs of older persons. Features ease of writing, editing, and printing with commands on screen.

HOMEWORD PLUS WRITER & SPELLER
(Word Processors, Ages: 10-Adult) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Sierra On-Line Inc., $69.95
Description: A word processor controlled by 46 user-selected icons, small pictures representing the choices of writing and editing tools. Requires only short and easy-to-read manual.

TIC TAC SHOW (Games, General-Purpose, Ages: 5-Adult) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Advanced Ideas Inc., $39.95
Description: Rote drill, educational game. Combines the strategy of Tic-Tac-Toe with an entertaining quiz show question-and-answer game. Full of exciting sound effects and colorful, animated graphics.

SQUARE PAIRS
(Games, General-Purpose, Ages: 7-18) Systems: Apple II, Atari 4/8/12, Commodore 64, Other
Availability: Scholastic, Inc., $39.95
Description: Rote drill, educational game. User enters cue-answer pairs which are then used to construct game; can use exact matches, word pairs, problem and answers, or shape match.

CROSSWORD MAGIC (Games, General-Purpose, Ages: 8-18) Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: Mindscape, Inc., $59.95
Description: Educational game, tool program. User can create crossword puzzles for own and others' enjoyment and challenge. An enjoyable way to study or review any subject.

MEMORY CASTLE
(Study Skills, Ages: 11-Adult)
Systems: Apple II, Commodore 64, TRS Color Computer, IBM PC & Compatibles, Other
Availability: Sunburst Communications, $59
Description: Tutorial, educational game. Gives user practice in remembering and following directions. He/she memorizes a list of instructions that allows moving from room to room in a castle.

REMEMBER! (Study Skills, Ages: 13-Adult)
Systems: Apple II, Commodore 64, IBM PC & Compatibles, Other
Availability: DesignWare, Inc., $79.95
Description: Rote drill. A learning tool for studying and remembering facts, lists, sequences, and relationships. Promotes long-term retention required in a wide variety of subjects.

Computers

TURTLE TRACKS (Computer Programming, Ages: 8-Adult) Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: Scholastic, Inc., $39.95
Description: Language processor. A LOGO-like language which combines turtle graphics and music with elements of BASIC. Enables the beginner to create and save a wide variety of programs while learning programming.

ARROW DYNAMICS: PROGRAMMING GAME (Computer Programming, Ages: 12-Adult)
System: Apple II
Availability: Sunburst Communications, $59
Description: Simulation, educational game. Combines the challenge of chess with the structure of programming to reinforce programming basics and promote logical thinking.

BLAZING THE BASIC TRAIL (BASIC, Ages: 13-Adult) System: Apple II
Availability: Sunburst Communications, $59
Description: Skills practice, educational game. Helps user develop logical thinking skills while learning key programming concepts. He/she must arrange statements into a program to transform colored blocks or shapes.

EZ LOGO REVISED EDITION (Logo/Turtle Graphics, Ages: 5-9) System: Apple II
Availability: MECC, $49
Description: Language processor. Provides opportunity to use computer in self-directed ways. With simple set of one-letter commands, the child can control computer and explore its capabilities.

LOGO (Logo/Turtle Graphics, Ages: 6-Adult)
System: Commodore 64
Availability: Commodore Bus. Mach., Inc., $73.95
Description: Language processor. An educational programming language used to create texts, sound, pictures, and sprites. Graphics are drawn using a cursor called a Turtle; 16 colors available.

TURTLE TUTOR - FIRST COURSE IN LOGO (Logo/Turtle Graphics, Ages: 7-10) Systems: Apple II, Commodore 64
Availability: DLM Learning Resources, $46
Description: Educational game, concept development. Five games, each with several difficulty levels, help children learn to move cursor around the computer screen.Tasks range from matching and duplicating shapes to creating original designs.

PILOT (WITH TURTLE GRAPHICS) (PILOT, Ages: 6-Adult) System: Atari 4/8/12
Availability: Atari Corp., $19.95
Description: Language processor. Easy-to-learn programming language that allows user to create instruction and practice dialogs using text, color, graphics, and music.

ROCKY'S BOOTS (Computer Science, Ages: 8-18) Systems: Apple II, Commodore 64, TRS Color Computer, IBM PC & Compatibles, Other
Availability: The Learning Company, $49.95
Description: Skills practice, simulation. User designs own logic machines, using simulated computer circuits; learns high-level reasoning skills and principles of computer logic and circuitry.

SIMULATED COMPUTER (Computer Science, Ages: 13-18) Systems: Apple II, Atari 4/8/12, Commodore 64, TRS-80 1/3/4, Other
Availability: EduSoft, $24.95
Description: Tutorial, simulation. Learner runs his/her own simplified computer model and learns machine-language programming principles. The screen displays input and output, internal register, and 20 memory locations.

COMPUTER LITERACY: HANDS-ON APPROACH (Computer Literacy, Ages: 13-18)
Systems: Apple II, TRS-80 1/3/4
Availability: McGraw-Hill/Webster Division, $28
Description: Skills practice, tutorial. Comprehensive coverage of history, social issues, computer usage, problem solving, applications, and structured programming in BASIC.

Computers (cont)

COMPUTER LITERACY: INTRODUCTION
(Computer Literacy, Ages: 13-Adult)
Systems: Apple II, Atari 4/8/12, Tex Inst TI99
Availability: Control Data, $39.95
Description: Tutorial. Helps prepare the student to use computers effectively in study and work, and to understand how computers affect his/her life and how to be an effective consumer of computer products and services.

ROBOT ODYSSEY I
(Familiarization, Ages: 15-Adult) System: Apple II
Availability: The Learning Company, $49.95
Description: Simulation, concept development. An open-ended program in which the learner designs robots, programs their behavior, and uses them to travel through a complicated maze. Joystick or mouse optional.

TEXT TIGER (Using System and Application Programs, Ages: 7-18) System: Apple II
Availability: MindPlay, $39.99
Description: Skills practice, educational game. Prepares the learner to use a word processor. Includes four games: KEYBOARD QUEST, TIFFY TEXT, CURSOR RALLY, and EAGLE-EYE EDITOR.

PROFESSOR 3T - PC/DOS (Using System and Application Programs, Ages: 11-Adult) Systems: IBM PC & Compatibles, Other
Availability: Software Academy, Inc., $69
Description: Tutorial. Complete computer familiarization and operating system tutorial. Includes tests, lessons, test scoring, status report, glossary, and certificate; is user-controlled.

Early Learning/Preschool

GERTRUDE'S SECRETS (Ages: 4-9)
Systems: Apple II, Commodore 64, IBM PC & Compatibles, Other
Availability: The Learning Company, $44.95
Description: Educational game. The user solves challenging color and shape puzzles with puzzle pieces of his/her own design; learns to recognize and categorize patterns. Features seven different games.

DINOSAURS (Ages: 5-Adult)
Systems: Apple II, Commodore 64
Availability: Advanced Ideas Inc., $39.95
Description: Skills practice, educational game. Up to six friendly beasts, each with its own sound, stomp, fly, or swim across the screen as child animates them to perform different tasks.

JUGGLES' RAINBOW (Ages: 5-7)
Systems: Apple II, Commodore 64, TRS Color Computer, IBM PC & Compatibles
Availability: The Learning Company, $29.95
Description: Skills practice, educational game. The user plays with dancing rainbows, butterflies and windmills while learning how to use the computer. Very young children learn important reading and math readiness skills.

STICKYBEAR OPPOSITES (Ages: 5-7)
Systems: Apple II, Atari 4/8/12, Commodore 64
Availability: Weekly Reader Family, $39.95
Description: Rote drill. Uses big, colorful animated pictures that teach beginning learners all about opposites, including up/down, full/empty, and in-front/behind.

STICKYBEAR SHAPES (Ages: 5-7)
Systems: Apple II, Atari 4/8/12, Commodore 64
Availability: Weekly Reader Family, $39.95
Description: Rote drill, educational game. Helps children learn about shapes and relationships between sizes. In three colorfully-animated activities, learners name a shape, pick a shape, or find a shape. Rewards for correct responses.

BODY AWARENESS (Ages: 5-Adult)
System: Apple II
Availability: Learning Well, $49.95
Description: Skills practice, educational game. Three separate activities for preschool and up for learning parts of the body. One game teaches the position of body parts, a second matches pictures to body part words, and the third combines clothes with seasons.

LEARNING WITH LEEPER (Ages: 5-8)
System: Apple II
Availability: Encyclopaedia Britannica, $37
Description: Skills practice, educational game. A bouncy character leads children through four high-resolution animated games that teach shape matching, counting, eye-hand coordination, and exercise creativity. Fully animated.

SHAPES (Ages: 5-8)
Systems: Apple II, Commodore 64, TRS Color Computer, Other
Availability: MECC; only available in package - not separately 'Pre-Reading', $39
Description: Rote drill, educational game. Reinforces memory of shapes and location along with providing an opportunity for developing problem-solving skills. Uses a Concentration game format.

EARLY DISCOVERIES - PATTERNS AND SEQUENCES (Ages: 6-7) System: Apple II
Availability: Hartley Courseware, Inc., $35.95
Description: Skills practice, educational game. Activity kit with software and other materials for matching, counting, and shape manipulation games. Materials and software are organized into sequence of activities for basic skills practice.

COMPARISON KITCHEN (Ages: 6-9)
System: Apple II
Availability: DLM Learning Resources, $32.95
Description: Educational game, concept development. Six different activities help children learn to compare and differentiate sizes, shapes, and colors. Music and graphics make each sequenced game an enjoyable learning experience.

TEDDY'S PLAYGROUND (Ages: 6-10)
System: Apple II
Availability: Sunburst Communications, $59
Description: Skills practice, concept development. The child develops critical thinking skills as he/she travels among the areas of a playground and learns to distinguish shapes, colors, and shading.

TONK IN THE LAND OF BUDDY-BOTS
(Ages: 6-10) Systems: Apple II, Atari 4/8/12, Atari 65/130, Commodore 64, IBM PC & Compatibles
Availability: Mindscape, Inc., $39.95
Description: Skills practice, educational game. Provides activities in distinguishing shapes and patterns to improve visual discrimination skills and memory, concentration, and problem-solving skills.

English/Language Arts

M-SS-NG L-NKS: MICRO ENCYCLOPEDIA (Multiple Topics, Ages: 9-Adult) Systems: Apple II, Atari 4/8/12, Commodore 64, TRS-80 1/3/4, IBM PC & Compatibles
Availability: Sunburst Communications, $59
Description: Educational game. Helps improve all facets of reading and language skills. A literary passage appears on screen with letters omitted. The learner fills in blanks by making educated guesses.

ALPHABET CIRCUS (Alphabetizing, Ages: 5-8) System: Apple II
Availability: DLM Learning Resources, $29.95
Description: Educational game. Covers recognition of alphabet, alphabetical order, locating letters on keyboard, associating letters with pictures, problem-solving, and entering words at keyboard.

POETRY EXPRESS (Composition/Writing, Ages: 8-18) Systems: Apple II, Commodore 64
Availability: Learning Well, $49.95
Description: Skills practice, tutorial. Samples, explanations and line-by-line guidance provide help to beginner in creating and printing original poetry. As poetry writing skills increase, learner edits verse and learns several different styles.

PROTEUS JR. THE IDEA PROCESSOR (Composition/Writing, Ages: 9-13) Systems: Apple II, Commodore 64
Availability: Research Design Associates, $59.95
Description: Concept development. Addresses prewriting for all curriculum areas. Uses five interactive strategies to help writers discover, explore, and expand ideas prior to drafting. Includes help screens.

BANK STREET STORYBOOK (Composition/Writing, Ages: 9-15) Systems: Apple II, Comm. 64, IBM PC & Compatibles
Availability: Mindscape, Inc., $49.95
Description: Tool program, word processor. Allows learners to create their own stories and illustrations. Helps learner develop creative writing skills. Can use in all subject areas.

HIDE 'N SEQUENCE (Composition/Writing, Ages: 9-18) Systems: Apple II, Commodore 64
Availability: Sunburst Communications, $69
Description: Skills practice. Exercises sequence skills in reading and writing. Three cartoon-like storytellers give the learner a choice of three sentences. He/she picks the sentence most likely to come next in a story.

CALLIOPE
(Composition/Writing, Ages: 11-Adult)
Systems: Apple II, Macintosh
Availability: Innovision, $59.95
Description: Concept development, text editor. A free-form idea processor that supports the mind-mapping and clustering techniques of modern writing projects. Can generate files for use with other programs.

WORD INVASION (Grammar and Usage, Ages: 8-Adult) Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: DLM Learning Resources, $44
Description: Rote drill, educational game. Provides practice in identifying words representing six parts of speech - nouns, pronouns, verbs, adjectives, adverbs, and prepositions - by letting player control Allen Octupus' magic ring.

VERBS (Grammar and Usage, Ages: 8-Adult)
System: Apple II
Availability: Hartley Courseware, Inc., $39.95
Description: Skills practice, tutorial. Provides individualized instruction on the correct use of verbs. Covers identification of verbs, agreement of subject and verb, identification and correct usage of verb forms, and more.

GRAMMAR GREMLINS
(Grammar and Usage, Ages: 9-Adult)
Systems: Apple II, IBM PC & Compatibles
Availability: Davidson & Associates, $49.95
Description: Tutorial, educational game. A comprehensive program for young learners. Grammar rules are presented with over 700 practice sentences to reinforce learning.

NOUNS/PRONOUNS (Grammar and Usage, Ages: 9-Adult) System: Apple II
Availability: Hartley Courseware, Inc., $39.95
Description: Skills practice, tutorial. A concept or rule is introduced followed by practice which requires the learner to apply the rule he/she has just learned. Fifteen lessons.

WALLY'S WORD WORKS GRADES 4-6
(Grammar and Usage, Ages: 10-12)
Systems: Apple II, Commodore 64
Availability: Sunburst Communications, $69
Description: Skills practice, educational game. Users earn points by directing Wally to pick up words and deposit them in correct speech pocket, using word's position and function in sentences as clues. 'Rovers' try to interfere.

MYSTERY SENTENCES (Grammar and Usage, Ages: 12-18) Systems: Apple II, Commodore 64
Availability: Scholastic, Inc., $59.95
Description: Skills practice, educational game. Learners are presented with mystery sentence, with only number of words and respective parts of speech appearing. They solve sentence by uncovering one letter at a time, guessing words, getting clues.

STICKYBEAR SPELLGRABBER (Spelling, Ages: 7-10) Systems: Apple II, Commodore 64
Availability: Weekly Reader Family, $39.95
Description: Rote drill, educational game. Three fun activities are provided using over 4,000 words specially selected from Weekly Reader and Ginn Lexicon dictionary. Additional word lists may be entered, which adds flexibility.

MAGIC SPELLS (Spelling, Ages: 7-11)
Systems: Apple II, Atari 4/8/12, Commodore 64, TRS Color Computer, IBM PC & Compatibles
Availability: The Learning Company, $34.95
Description: Skills practice, educational game. User sharpens spelling skills in adventure world of castles, demons and wizards. Children ages 6-10 spell and unscramble words with 14 word lists. Players can tailor the game.

BOPPIE'S GREAT WORD CHASE
(Spell'g, Ages: 7-14) Systems: Apple II, Comm. 64, IBM PC & Compatibles
Availability: DLM Learning Resources, $32.95
Description: Skills practice, educational game. Children spell or unscramble words as they manipulate character through a maze. The eight levels of play include a training level for young or easily frustrated players.

SPELLAGRAPH™ (Spelling, Ages: 8-14)
Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: DesignWare, Inc., $39.95
Description: Skills practice, educational game. Players try to guess a picture word puzzle hidden behind squares. With each turn, a player must correctly spell a word identified by a context sentence.

English/Language Arts (cont)

CRYPTO CUBE™ (Spelling, Ages: 9-Adult)
Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: DesignWare, Inc., $39.95
Description: Skills practice, educational game. The game screen consists of a rotating cube which shows four sides with squares similar to a crossword puzzle. One or two players can try to guess and uncover words hidden behind the squares.

SPELL IT (Spelling, Ages: 11-18)
Systems: Apple II, Macintosh, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: Davidson & Associates, $49.95
Description: Skills practice, educational game. Teaches 1,000 or more commonly misspelled words and the spelling rules that go with them. Four different activities are used to improve spelling.

M-SS-NG L-NKS: YOUNG PEOPLES' LITERATURE (Literature, Ages: 9-18)
Systems: Apple II, Commodore 64, TRS-80 1/3/4, IBM PC & Compatibles, Other
Availability: Sunburst Communications, $59
Description: Skills practice, educational game. Improves all facets of reading and language skills. A literary passage appears on screen with letters omitted. User fills in blanks by making guesses. Passages are from nine classics.

M-SS-NG L-NKS: CLASSICS, OLD & NEW (Literature, Ages: 13-18) Systems: Apple II, Commodore 64, TRS-80 1/3/4, IBM PC & Compatibles
Availability: Sunburst Communications, $59
Description: Skills practice, educational game. Helps improve all facets of reading and language skills. A literary passage appears on screen with letters omitted. User fills in blanks by making educated guesses.

Fine Arts

FACEMAKER (Art, Ages: 5-10)
Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles, Other
Availability: Spinnaker Software, $39.95
Description: Educational game. The child completes a blank face by choosing eyes, ears, nose, mouth and hair; then makes the face wink, smile, frown, cry, stick out its tongue, and wiggle its ears; and finally tries to reproduce a pattern of winks and wiggles.

MAGIC CRAYON (Art, Ages: 5-10)
System: Apple II
Availability: C & C Software, $45
Description: Tool program. Allows the child to draw pictures and designs. Drawing color and other options are controlled with simple keystroke commands. Saves pictures.

PIC BUILDER (Art, Ages: 5-12)
Systems: Apple II, Atari 4/8/12, Commodore 64
Availability: Weekly Reader Family, $39.95
Description: Skills practice, tool program. Learners create and build color pictures with blocks, one block at a time like a construction set. Joystick or paddle optional. Includes user's guide, poster, and five palettes.

BLAZING PADDLES (Art, Ages: 7-Adult)
System: Apple II
Availability: Baudville, $34.95
Description: Tool program. Provides artistic tools needed to create computer art. Includes color mixing to create over 200 textured hues, painting with a variety of brush strokes, air brushing, and more.

STICKYBEAR DRAWING (Art, Ages: 8-18)
System: Apple II
Availability: Weekly Reader Familye, $39.95
Description: Simulation. Special features include freehand DRAW, CIRCLE, BOX or LINES, plus a variety of BRUSHES and COLORS. User can erase mistakes without losing the rest of a picture.

CREATE WITH GARFIELD! DELUXE (Art, Ages: 9-14) Systems: Apple II, Commodore 64
Availability: DLM Learning Resources, $39.95
Description: Skills practice, educational game. Two-disk program with over 200 pieces of art and borders. Enables the user to create elaborate, detailed cartoons, labels, and posters.

CREATE YOUR OWN GREETING CARDS (Art, Ages: 9-14)
Systems: Apple II, IBM PC & Compatibles
Availability: Communication Skill Builders, $39.95
Description: Simulation. The child can sharpen his/her creative and communication skills with this activity. Can indicate who the card is for and who it is from, plus a personalized message for the recipient.

MR. PIXEL'S CARTOON KIT (Art, Ages: 9-14)
Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Mindscape, Inc., $39.95
Description: Tool program. Lets user animate images on screen. Thirty objects can be moved on one of three backgrounds, or users can design and animate images.

MUSIC FUNDAMENTALS - BEGINNING MUSIC I (Music, Ages: 8-18)
Systems: Apple II, Atari 4/8/12
Availability: Silver Burdett & Ginn, $39.95
Description: Tutorial. Introduces, for music beginners, high and low sounds; steps, leaps, and repeats; names of notes; names of keyboard keys; and reading/playing short note patterns.

SONGWRITER (Creative Tools, Ages: 7-14)
Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: Mindscape, Inc., $9.95
Description: Skills practice, tool program. Allows user to compose music and learn music theory without standard musical notation. Songs and ideas can be composed and stored on disk for further playing, editing or transposing.

BANK STREET MUSIC WRITER (Creative Tools, Ages: 9-18)
Systems: Apple II, IBM PC & Compatibles
Availability: Mindscape, Inc., $49.95
Description: Tool program. Helps user learn correct musical notations; allows experimenting with melody, harmony, and rhythm. Editing modes provide familiar word processing features.

MUSIC CONSTRUCTION SET (Creative Tools, Ages: 13-Adult)
Systems: Apple II, Atari 4/8/12, Commodore 64
Availability: Electronic Arts, $14.95
Description: Tool program. Enables the amateur composer to see, hear, and make music using standard musical notation. Content topics include notation, rhythm, harmony, melody, and tempo.

Foreign Language

THE LINGUIST (Ages: 13-Adult)
Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: Gessler Educational Software, $44.95
Description: Tool program, database retrieval. Language translation program available in French, Spanish, Grammar, English, Russian, Hebrew, Japanese, and 13 other languages. Displays the foreign alphabet or phonetic symbols.

M-SS-NG L-NKS - FRENCH EDITOR
(French, Ages: 9-Adult)
System: IBM PC & Compatibles
Availability: Sunburst Communications, $69
Description: Skills practice, educational game. Allows the user to prepare French passages to be used in the MISSING LINKS games (see M-SS-NG L-NKS programs under English/Language Arts), which will help him/her to improve all facets of language and reading skills.

FRENCH ACHIEVEMENT I
(French, Ages: 16-Adult)
Systems: Apple II, IBM PC & Compatibles, Other
Availability: Mindscape, Inc., $49.95
Description: Skills practice, test generator. Provides vocabulary practice in format of the French achievement examination. Learner has choice of four options in each statement to appropriately complete a sentence.

FRENCH ACHIEVEMENT II (French, Ages: 16-Adult) Systems: Apple II, IBM PC & Compatibles, Other
Availability: Mindscape, Inc., $49.95
Description: Skills practice, test generator. Grammar/vocabulary practice from 3rd level of high school through 4th and 5th (including AP vocabulary). From 200 problems, provides practice in format of CEEB French Achievement Exam.

FRENCH ACHIEVEMENT III
(Grammar and Usage, Ages: 16-Adult)
Systems: Apple II, IBM PC & Compatibles, Other
Availability: Mindscape, Inc., $49.95
Description: Skills practice. Addresses one aspect of grammar for the College Entrance Examination Board's French Achievement Exam. At the end of each session, a full error analysis is given.

LA GUILLOTINE (Vocabulary, Ages: 13-18)
Systems: Apple II, Commodore 64, TRS-80 1/3/4, IBM PC & Compatibles
Availability: Gessler Educational Software, $29.95
Description: Skills practice, educational game. French Hangman to help user review vocabulary. Includes text file for word entry.

BATAILLE DE MOTS (Vocabulary, Ages: 13-Adult) Systems: Apple II, Comm. 64, IBM PC & Compatibles
Availability: Gessler Educational Software, $49.95
Description: Skills practice, educational game. Arcade-game type French vocabulary drill. Contains hundreds of words. Teaches meanings and usage. Presents words in different sets of nouns, verbs, etc. Easy to enter own words.

M-SS-NG L-NKS - SPANISH EDITOR
(Spanish, Ages: 9-18) System: Apple II
Availability: Sunburst Communications, $69
Description: Skills practice, educational game. Allows the user to prepare Spanish passages to be used in the MISSING LINKS games (see M-SS-NG L-NKS programs under English/Language Arts), which will help him/her to improve all facets of language and reading skills.

LA CORRIDA DE TOROS (Vocabulary, Ages: 12-15) Systems: Apple II, Commodore 64, TRS-80 1/3/4, IBM PC & Compatibles
Availability: Gessler Educational Software, $29.95
Description: Skills practice, educational game. Spanish Hangman to help user learn vocabulary. Includes text file for word entry.

SPANISH VOCABULARY BUILDER
(Vocabulary, Ages: 13-Adult) System: Apple II
Availability: Control Data, $39.95
Description: Rote drill, educational game. Designed to improve learners' familiarity with the Spanish language. Each activity contains approximately 500 common and useful words.

SPANISH ACHIEVEMENT I
(Vocabulary, Ages: 16-Adult) Systems: Apple II, IBM PC & Compatibles, Other
Availability: Mindscape, Inc., $49.95
Description: Rote drill, skills practice. Provides vocabulary practice in format of the Spanish achievement examination. The user must select the appropriate word omitted.

Health

ALCOHOL-AN EDUCATIONAL SIMULATION (Drugs/Alcohol/Tobacco, Ages: 10-Adult)
System: Apple II
Availability: Marshware, $49.95
Description: Simulation, concept development. Users learn about the dangers of alcohol abuse in a safe, controlled way. At a party, various options are presented: whether or not to drink alcohol and how much, and whether to eat.

TOBACCO - TO SMOKE OR NOT TO SMOKE (Drugs/Alcohol/Tobacco, Ages: 10-Adult)
System: Apple II
Availability: Marshware, $49.95
Description: Tutorial, simulation. User follows a computer friend from age 15 to 70 after deciding whether that friend will smoke or not. User learns social, psychological, physical, and occupational implications of smoking.

Home Economics

HOME ENERGY SAVINGS (Conservation, Ages: 12-Adult) Systems: Apple II, TRS-80 1/3/4
Availability: HRM Software, $49
Description: Tutorial, educational game. Object of game is to make sensible investments in energy conservation in the home. User learns about various insulation methods, storm windows and doors, furnace replacements, etc.

MONEY MANAGEMENT DISK II
(Consumerism, Ages: 10-Adult) System: Apple II
Availability: Marshware, $49.95
Description: Tutorial. Helps learner develop a positive attitude and solid skills in many areas of basic money management, including applying for and using a credit card, obtaining a loan or mortgage, and more.

MONEY & BANKING
(Consumerism, Ages: 17-Adult) System: Apple II
Availability: DTI Data Trek, Inc., $40
Description: Tutorial, simulation. Provides an opportunity for users to explore the fundamentals of savings accounts, checking accounts, credit, and budgeting.

MONEY MANAGER
(Family Life, Ages: 11-18) System: Apple II
Availability: Computer Age Education, Inc., $29.95
Description: Skills practice, simulation. Develops personal financial planning skills by simulating eight weeks of the user's life in which he/she earns money, pays bills, makes purchases, manages bank accounts, and more.

BAKE & TASTE (Foods, Ages: 8-14)
Systems: Apple II, IBM PC & Compatibles
Availability: MindPlay, $39.99
Description: Skills practice, tutorial. Child learns how to measure, mix, and follow directions. Then the "taste test" tells learner whether culinary creation tastes right and is baked properly.

Home Economics (cont)

WHAT'S IN YOUR LUNCH?
(Foods, Ages: 10-18) Systems: Apple II, Atari 4/8/12, Commodore PET, Other
Availability: Lawrence Hall of Science, $24.95
Description: Tool program, database retrieval. Interactive program giving user nutrient value of a list of food items.

KELLOGG'S NUTRI-VENTURE™ (Foods, Ages: 13-Adult) Systems: Apple II, TRS-80 1/3/4
Availability: Kellogg's Nutri-Venture, $25
Description: Educational game, concept demonstration. Educates learners about nutrition and fitness. Players choose from three different games on each diskette.

WHAT DID YOU EAT YESTERDAY?
(Foods, Ages: 13-Adult) Systems: Apple II, Commodore 64, TRS-80 1/3/4, IBM PC & Compatibles
Availability: Learning Seed Co., $59
Description: Tool program, database retrieval. The user's nutritional needs are calculated and his/her diet is analyzed for calories, vitamins, fat, protein, sodium, and other nutrients. Analysis indicates excesses and deficiencies.

Logic/Problem Solving

GERTRUDE'S PUZZLES (Ages: 6-10)
Systems: Apple II, Commodore 64, IBM PC & Compatibles, Other
Availability: The Learning Company, $44.95
Description: Skills practice, educational game. User analyzes complex logic puzzles using hand-designed computer graphics. Sharpens abstract thinking and reasoning skills. Features six different games.

MOPTOWN PARADE (Ages: 6-10)
Systems: Apple II, Atari 4/8/12, Commodore 64, TRS Color Computer, IBM PC & Compatibles
Availability: The Learning Company, $39.95
Description: Educational game, concept development. A progression of seven playful games designed around colorful Moppet characters teach logic, strategy development, and pattern recognition. Children arrange and match imaginary Moptown characters.

THE POND: STRATEGIES IN PROBLEM SOLVING (Ages: 8-18)
Systems: Apple II, TRS Color Computer
Availability: Sunburst Communications, $59
Description: Simulation. The user helps a small green frog, lost in the lily pads, to get across pond. This helps the learner to form patterns, to generalize from available data, and to think logically.

JINX/WELTER (Ages: 9-15)
Systems: Apple II, Commodore PET, Commodore 64
Availability: Island Software, $25
Description: Skills practice, educational game. Two games develop deductive reasoning and insight into mathematical abstractions. One is board game against computer, other is similar to Nim.

TRAFFIC JAM/CHAIN REACTION
(Ages: 9-15) Systems: Apple II, Commodore PET, Commodore 64
Availability: Island Software, $25
Description: Skills practice, educational game. In TRAFFIC JAM, player tries to move the cars so that opponent cannot make any moves. In CHAIN REACTION, player tries to prevent contents of boxes from reaching explosive limit.

THE FACTORY: STRATEGIES IN PROBLEM SOLVING (Ages: 10-18)
Systems: Apple II, Commodore 64, TRS Color Computer, IBM PC & Compatibles, Other
Availability: Sunburst Communications, $59
Description: Skills practice, simulation. Challenges user to create geometric "products" on a simulated machine assembly line of his/her own design. Includes three programs: TEST A MACHINE, BUILD A FACTORY, and MAKE A PRODUCT.

ENCHANTED FOREST - A GAME OF LOGIC (Ages: 10-Adult) Systems: Apple II, IBM PC & Compatibles
Availability: Sunburst Communications, $59
Description: Skills practice, educational game. A mathematics fairy tale for learners of all ages; helps them think logically and understand concepts of conjunction (and), disjunction (or), and negation (not).

CONCEPTOR (Ages: 11-Adult)
Systems: Apple II, Macintosh, Commodore 64, IBM PC & Compatibles
Availability: Mentor Learning Systems, $59.95
Description: Educational game, concept development. Concept builder that expands critical thinking and problem-solving abilities. Immediately transferable to reading, math, science, and problem-solving.

CHECKERS (Ages: 13-18)
Systems: Apple II, Atari 4/8/12, Commodore 64
Availability: Odesta, $49.95
Description: Tutorial, educational game. Plays the game of Checkers against user or against itself. Sixteen levels of difficulty. Plays give-away (object is to make opponent take pieces). Can present instant replay of a game.

ODIN
(Ages: 13-18) Systems: Apple II, Atari 4/8/12
Availability: Odesta, $49.95
Description: Tutorial, educational game. Plays the game of Othello. Fourteen difficulty levels. Program helps the user become a better player. Accompanying book contains helpful usage, strategy, and historical information.

MOPTOWN HOTEL (Ages: 15-18)
Systems: Apple II, Atari 4/8/12, Commodore 64, TRS Color Computer, IBM PC & Compatibles
Availability: The Learning Company, $39.95
Description: Skills practice, educational game. In seven increasingly challenging games, children test hypotheses, use analogies, and develop strategic thinking skills. Children arrange Moppets in Moptown's fantasy world.

Mathematics

COMPUTER MATH GAMES VOL. 3
(Multiple Topics, Ages: 7-15) System: Apple II
Availability: Addison-Wesley Pub. Comp., $52.50
Description: Skills practice, educational game. Covers comparing whole numbers, whole number facts, squaring numbers, counting, adding integers, and reducing fractions.

ARITH-MAGIC II
(Multiple Topics, Ages: 10-16) Systems: Apple II, TRS-80 1/3/4, IBM PC & Compatibles
Availability: Quality Educational Designs, $35
Description: Skills practice, educational game. Consists of three games, two help programs, and two explorations of mathematical questions which arise in the games. Includes: Squ/area Game, The Rectangle Game, and Per/area Game.

TEASERS BY TOBBS
(Arithmetic, Multiplication and Division, Ages: 10-Adult) Systems: Apple II, Commodore 64, TRS-80 1/3/4, IBM PC & Compatibles, Other
Availability: Sunburst Communications, $59
Description: Educational game, concept development. Two programs with multiple difficulty levels give learners practice in logically solving addition and multiplication problems. User identifies missing numbers in problems presented by Tobbs.

MATH BLASTER (Arithmetic, Four Basic Operations, Ages: 7-12) Systems: Apple II, Atari 65/130, Commodore 64, IBM PC & Compatibles
Availability: Davidson & Associates, $49.95
Description: Rote drill, skills practice. Contains over 600 problems in five basic arithmetic operations. Problems are grouped in "families of facts" and can be used with four different learning activities.

MATH MAZE™ (Arithmetic, Four Basic Operations, Ages: 7-12) Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: DesignWare, Inc., $39.95
Description: Skills practice, educational game. Children solve addition, subtraction, multiplication, and division problems given by computer. After arriving at solution, learners construct answer by successfully navigating a maze.

HEY TAXI! (Arithmetic, Four Basic Operations, Ages: 7-14) Systems: Apple II, IBM PC & Comp.
Availability: Media Materials, Inc., $39.95
Description: Skills practice, educational game. The user maneuvers a taxicab through the city streets to pick up passengers. He or she solves basic math facts problems to collect the fares.

GULP!! (Arithmetic, Four Basic Operations, Ages: 8-12) System: Apple II
Availability: Milliken Publishing Company; in package 'Gulp!!/Frenzy', $34.95
Description: Skills practice, educational game. Children answer 20 basic facts problems as a little fish is chased by a big fish. A bonus game will test learners' "fishing" skills.

PIECE OF CAKE MATH (Arithmetic, Four Basic Operations, Ages: 8-12) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Springboard Software, Inc., $34.95
Description: Skills practice, educational game. Five games that take children into a magical bakery where they can learn to add, subtract, multiply, and divide. They have to work fast to keep the cakes from falling splat.

ARITH-MAGIC™
(Arithmetic, Four Basic Operations, Ages: 9-14)
Systems: Apple II, Commodore PET, Commodore 64, TRS-80 1/3/4, IBM PC & Compatibles
Availability: Quality Educational Designs, $35
Description: Skills practice, educational game. Explores concepts and presents motivated practice in whole number operations. Consists of The Case of the Disappearing Differences, an addition or multiplication puzzle, and an exploration of patterns.

BUMBLE GAMES
(Coordinate Systems & Graphing, Ages: 5-10)
Systems: Apple II, Atari 4/8/12, Commodore 64, TRS Color Computer, IBM PC & Compatibles
Availability: The Learning Company, $39.95
Description: Skills practice, educational game. The user develops geometry skills by plotting positive numbers on grids. Also learns concepts of "greater than" and "less than" as he/she hunts for playful characters.

BUMBLE PLOT
(Coordinate Systems & Graphing, Ages: 9-14)
Systems: Apple II, TRS Color Computer
Availability: The Learning Company, $39.95
Description: Skills practice, educational game. The user creates original computer graphics by plotting positive and negative numbers on a four-quadrant grid; he/she learns mapping skills necessary for making charts and graphs.

SAFARI SEARCH (Coordinate Systems & Graphing, Ages: 9-Adult) System: Apple II
Availability: Sunburst Communications, $59
Description: Educational game, concept development. Takes learners on a safari trip through a grid-like environment where they must decipher different types of clues, including whether they are getting hotter or colder.

MAGIC CASH REGISTER
(Currency, Ages: 8-12) System: Apple II
Availability: Metacomet Software, $34.95
Description: Tutorial, concept development. Teaches about money by letting child become cashier of own make-believe store. The Wizard on screen explains what to do at each step.

FAY: THAT MATH WOMAN (Equations, Ages: 7-9) Systems: Apple II, Commodore 64
Availability: Didatech Software Limited, $39.95
Description: Concept demonstration, skills practice. The animated character Fay provides a graphic illustration of how basic arithmetic equations work. Fay shows the child's answer by walking or leaping along the number line.

MEANING OF FRACTIONS
(Fractions, Ages: 7-12) System: Apple II
Availability: Computer Age Education, Inc., $34.95
Description: Tutorial, concept development. A series of programs on basic fraction concepts, including 'numerator' and 'denominator', types of fractions, and graphical equivalents of fractions.

MULTIPLYING FRACTIONS
(Fractions, Ages: 11-14) Systems: Apple II, Comm. 64, IBM PC & Compatibles, Other
Availability: Mindscape, Inc., $29.95
Description: Skills practice. Practice in cancelling and reducing. All work is done on the screen which is divided into areas for original problem, work, and messages. The learner must cancel or reduce before carrying out operation.

FISH SCALES
(Measurement/Metric, Ages: 6-9) System: Apple II
Availability: DLM Learning Resources, $32.95
Description: Skills practice, educational game. High-quality graphics, animation, and sound will capture players' attention as they learn how things are measured for height, length, and distance, and how measurement is used in comparisons.

Mathematics (cont)

STICKYBEAR NUMBERS (Number Systems & Counting, Ages: 5-7) Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: Weekly Reader Family, $39.95
Description: Rote drill, skills practice. Colorful groups of big, animated objects, including Stickybears, trucks, ducks, planes, etc. teach numbers and counting using numerals 1 to 10.

TOBBS LEARNS ALGEBRA (Algebra, Ages: 12-18) Systems: Apple II, TRS-80 1/3/4
Availability: Sunburst Communications, $59
Description: Educational game, concept development. Develops users' algebraic thinking, hypothesis making/testing abilities, and problem-solving skills. Includes three games.

EQUATIONS (Algebra, Ages: 14-17)
Systems: Apple II, Commodore 64, IBM PC & Compatibles, Other
Availability: Mindscape, Inc., $29.95
Description: Skills practice. Gives learner practice in solving equations in the form Ax + B = C. All equations are generated randomly. All solutions are integer values. Reports all errors to user.

EQUATIONS II (Algebra, Ages: 14-17)
Systems: Apple II, Commodore 64, IBM PC & Compatibles, Other
Availability: Mindscape, Inc., $29.95
Description: Skills practice. Users solve equations in the form Ax + B = Cx + D or Ax + B = Cx. Problems are solved step-by-step, and all work is done on the screen. After each step the equation is updated.

SOLVING QUADRATIC EQUATIONS
(Algebra, Ages: 14-17) Systems: Apple II, Commodore 64, IBM PC & Compatibles, Other
Availability: Mindscape, Inc., $29.95
Description: Skills practice, tutorial. Practice solving random quadratic equations by factoring. Solution attainable by factoring expression, setting both factors to zero, and solving.

ALGEBRA BILLIARDS (Algebra, Ages: 14-18)
Systems: Apple II, TRS-80 1/3/4, IBM PC & Compatibles, Other
Availability: Curriculum Applications, $24.95
Description: Skills practice, tutorial. Practice, in billiard game format, in evaluating linear expressions by substitution. Gives help; uses graphics and sound.

MISSION: ALGEBRA
(Algebra, Ages: 14-Adult)
Systems: Apple II, Atari 4/8/12, Atari 65/130, Commodore 64, IBM PC & Compatibles
Availability: DesignWare, Inc., $44.95
Description: Skills practice, educational game. Thousands of linear equations of varying difficulty levels are generated by the program. The user will be able to practice algebra skills until he/she masters the subject.

ALGEBRA ARCADE (Algebra, Ages: 14-Adult)
Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: COMPress, $49.95
Description: Skills practice, educational game. Spans many levels of sophistication. Successful equations may range from simple horizontal lines to composite trigonometric functions. Has "equation family" feature.

SURVIVAL MATH: SIMULATIONS
(General Math, Ages: 12-Adult) Systems: Apple II, Commodore 64, TRS-80 1/3/4
Availability: Sunburst Communications, $59
Description: Skills practice, simulation. Gives practice in calculating and estimating for decision-making in everyday situations. Includes budgeting, running own small business, and pricing.

GOLF CLASSIC (Geometry, Ages: 10-14)
Systems: Apple II, Atari 4/8/12, Other
Availability: Milliken Publishing Company, $39.95
Description: Skills practice, educational game. Covers angle and length estimation and geometric skills practice. Each player determines the angle at which a golf ball should be hit and number of units of distance it travels.

ANGLES OF TRIANGLES AND POLYGONS
(Geometry, Ages: 15-Adult) System: Apple II
Availability: Scott, Foresman and Company, $49.95
Description: Tutorial, concept development. Lessons addressing specific objectives in geometry. Each contains essential tutorials, problem sets, and step-by-step guidelines to ensure mastery.

CONGRUENT TRIANGLES
(Geometry, Ages: 15-Adult) System: Apple II
Availability: Scott, Foresman and Company, $49.95
Description: Tutorial, concept development. Lessons addressing specific objectives in geometry. Each contains essential tutorials, problem sets, and step-by-step guidelines to ensure mastery.

MORE ON CONGRUENT TRIANGLES
(Geometry, Ages: 15-Adult) System: Apple II
Availability: Scott, Foresman and Company, $49.95
Description: Tutorial, concept development. Lessons addressing specific objectives in geometry. Each contains essential tutorials, problem sets, and step-by-step guidelines to ensure mastery.

QUADRILATERALS
(Geometry, Ages: 15-Adult) System: Apple II
Availability: Scott, Foresman and Company, $49.95
Description: Tutorial, concept development. Lessons addressing specific objectives in geometry. Each contains essential tutorials, problem sets, and step-by-step guidelines to ensure mastery.

Reading

ACE REPORTER (Comprehension Skills, Ages: 8-12) System: Apple II
Availability: MindPlay, $39.99
Description: Skills practice. Becoming an ace reporter means uncovering who, what, when, where, and why before the paper goes to press. The child gathers the facts for his/her stories by reading a teletype display.

WINNIE THE POOH IN 100-ACRE WOOD (Comprehension Skills, Ages: 8-12) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Walt Disney , $44.95
Description: Skills practice, educational game. Each character in Hundred Acre Wood lost an important belonging when a blustery wind scattered things around. Children must search for belongings and gather clues about their owners.

SHERLOCK HOLMES MASTERS OF MYSTERY (Comprehension Skills, Ages: 11-Adult)
Systems: Apple II, Commodore 64
Availability: Data Command, $49.95
Description: Skills practice, concept development. Learner reads the introduction to one of four mysteries and travels to different locations gathering information. He/she may choose to take a quiz which tests deductive powers.

SPEED READER II (Comprehension Skills, Ages: 12-Adult) Systems: Apple II, Macintosh, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: Davidson & Associates, $69.95
Description: Skills practice. Complete reading improvement course; professionally-designed exercises help build reading speed and comprehension. Contains 35 interesting reading selections, followed by questions.

WORD RADAR (Decoding Skills, Ages: 7-10)
Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: DLM Learning Resources, $46
Description: Rote drill, educational game. Provides practice in matching basic sight words. The player is a control tower operator scanning words.

EASY AS ABC (Reading Readiness, Ages: 5-7)
Systems: Apple II, Macintosh, Commodore 64, IBM PC & Compatibles
Availability: Springboard Software, Inc., $39.95
Description: Skills practice, educational game. Five games with animated animal graphics let children have fun while learning the alphabet.

MUPPET WORD BOOK (Reading Readiness, Ages: 5-Adult) System: Apple II
Availability: Sunburst Communications, $59
Description: Educational game, concept development. An introduction to letters, words, and writing. Introduces the enjoyment of reading. Beginning language concepts are presented in colorful games that feature the famous Muppet gang.

STICKYBEAR ABC (Reading Readiness, Ages: 5-7) Systems: Apple II, Atari 4/8/12, Commodore 64
Availability: Weekly Reader Family, $39.95
Description: Rote drill, skills practice. Full-screen, colorful animated pictures and music represent each letter in the alphabet. A child can summon any letter and its corresponding picture by touching that key on the keyboard.

READER RABBIT & THE FABULOUS WORD FACTORY (Reading Readiness, Ages: 6-8) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: The Learning Company, $39.95
Description: Skills practice, educational game. Four consonant-vowel- consonant reading games covering matching words that have one letter in common, matching words that differ by one letter, and spelling words.

STICKYBEAR READING
(Vocabulary, Ages: 6-9) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Weekly Reader Family, $39.95
Description: Skills practice, educational game. Builds vocabulary and reading comprehension skills. Includes word-picture sets for vocabulary building, selecting the word to complete a sentence, and learning the parts of a sentence.

WIZARD OF WORDS (Vocabulary, Ages: 6-15)
Systems: Apple II, Commodore 64
Availability: Advanced Ideas Inc., $39.95
Description: Skills practice, educational game. Five different word games, each of which reinforces important language skills. Characters include a juggler, knight, princess, friendly fire-breathing dragon, and two heralds.

FAY'S WORD RALLY (Vocabulary, Ages: 7-9)
Systems: Apple II, Commodore 64
Availability: Didatech Software Limited, $49.95
Description: Skills practice, tutorial. Utilizing sentences and picture clues, the child 'drives' a car in a maze to the correct word. The 720 target words are graded into 80 sets of nine words of varying length.

MEMORY MATCH (Vocabulary, Ages: 8-11)
System: Apple II
Availability: Hartley Courseware, Inc., $39.95
Description: Skills practice, educational game. The child is required to match two items on a Concentration-type board. He/she chooses among 21 different lessons at 3 levels of difficulty.

WORD MAN (Vocabulary, Ages: 8-12)
Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: DLM Learning Resources, $46
Description: Rote drill, educational game. A tricky maze of tracks and rows provides practice in forming words with consonant-vowel-consonant and consonant-vowel-consonant-silent patterns.

WORD MASTER (Vocabulary, Ages: 8-12)
Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: DLM Learning Resources, $46
Description: Rote drill, educational game. Gives children practice identifying pairs of antonyms, synonyms, or homonyms, at three difficulty levels, while racing against time and advancing electronic rays.

VOCABULARY CHALLENGE (Vocabulary, Ages: 8-18) Systems: Apple II, Commodore 64
Availability: Learning Well, $49.95
Description: Skills practice, educational game. Includes four games which help learners develop specific vocabulary skills. Play reinforces word association, word definitions, and understanding of analogies.

THE HINKY PINKY GAME
(Vocabulary, Ages: 10-18) System: Apple II
Availability: Learning Well, $49.95
Description: Educational game. Players are presented with intriguing definitions and hints to help them discover pairs of rhyming words like "quacker backer", "computer tutor", and "local yokel".

WORD ATTACK (Vocabulary, Ages: 10-18)
Systems: Apple II, Atari 4/8/12, Commodore 64, IBM PC & Compatibles
Availability: Davidson & Associates, $49.95
Description: Skills practice, educational game. Four vocabulary building exercises (including a fast-action arcade game) access data files of 675 words. Words and sentences illustrating usage are presented on nine different levels.

Science

HEART LAB (Anatomy & Physiology, Ages: 13-Adult) Systems: Apple II, Atari 4/8/12, Commodore PET, Commodore 64, TRS-80 1/3/4
Availability: Educational Activities, Inc., $49.95
Description: Simulation. Animated graphics are used to model a functioning human heart.

TELLSTAR™ II (Astronomy, Ages: 10-Adult)
System: Apple II
Availability: Spectrum Holobyte, Inc., $49.95
Description: Simulation, tool program. Guide to the stars; helps the user discover the excitement of astronomy. He/she will see, locate, and identify constellations, stars, planets, Messier objects, and more.

HALLEY PROJECT - MISSION IN THE SOLAR SYSTEM (Astronomy, Ages: 11-18) Systems: Apple II, Atari 4/8/12, Commodore 64
Availability: Mindscape, Inc., $49.95
Description: Simulation, concept development. A realistic computer simulation that brings solar system right into the user's computer room. Learner must identify constellations and navigate by the stars to complete series of ten missions.

SKY TRAVEL (Astronomy, Ages: 11-Adult)
System: Commodore 64
Availability: Commodore Business Mach., $34.95
Description: Simulation, tool program. Provides view of sky from any place on earth at any time within 10,000-year span. Shows more than 1,200 stars, 88 constellations, Sun, Moon, planets, a number of deep-sky objects, and more.

PLANETARY CONSTRUCTION SET
(Astronomy, Ages: 14-Adult) System: Apple II
Availability: Sunburst Communications, $59
Description: Simulation, concept development. Graphics simulation that combines astronomy, physics and biology with experimentation, scientific measurement and classification skills. Three playing levels.

CELL GROWTH AND MITOSIS
(Cells and Tissues, Ages: 14-Adult) System: IBM PC & Compatibles
Availability: Classroom Consortia Media, $69.95
Description: Tutorial, simulation. Covers the development of a cell division beginning with a thorough analysis of why a cell divides. Surface area/volume ratio, chromosome number, chromosome replication, and cytoplasmic division are demonstrated.

CATLAB SECOND EDITION (Heredity, Ages: 15-Adult) Systems: Apple II, IBM PC & Comp.
Availability: Conduit, $75
Description: Skills practice, simulation. Allows user to simulate mating domestic cats selected by coat color and pattern and then shows genetically valid litters of kittens based on these matings.

THE MICRO GARDENER
(Plant Organisms, Ages: 10-18) System: Apple II
Availability: Educational Activities, Inc., $59.95
Description: Simulation, concept development. The learner studies up to 18 weeks of plant growth in 12 to 18 minutes in order to make decisions about planting and need for light, water, fertilizer, etc. Three levels of difficulty.

LEAF: STRUCTURE AND FUNCTION
(Plant Organisms, Ages: 14-Adult)
System: IBM PC & Compatibles
Availability: Classroom Consortia Media, $69.95
Description: Tutorial, simulation. User is guided through the anatomy and physiology of the leaf with respect to its role as the "chemical factory" of the plant. Includes color graphics and testing facility.

WILDERNESS: A SURVIVAL ADVENTURE
(Earth Science, Ages: 13-Adult)
Systems: Apple II, IBM PC & Compatibles
Availability: Electric Transit, Inc., $50
Description: Simulation, educational game. The user is the sole survivor of a plane crash in the Sierra Nevadas. Alone and miles from civilization, he/she must rely on a topographic map, a few supplies, and logical thinking to survive.

VOLCANOES (Earth Science, Ages: 13-Adult)
Systems: Apple II, IBM PC & Compatibles
Availability: Earthware Computer Services, $49.50
Description: Simulation, educational game. Two to four player-scientists do investigate and try to predict volcanic activity. Teaches cooperation and interpretation of ambiguous data.

MOISTURE IN THE ATMOSPHERE
(Earth Science, Ages: 15-Adult) Systems: IBM PC & Compatibles, Other
Availability: IBM, $44
Description: Skills practice, tutorial. Shows how the presence of moisture in the lower atmosphere is responsible for the various precipitations, how moisture moves through the atmosphere, how humidity is expressed, and more.

ODELL WOODS (Ecology/Environment, Ages: 8-14) Systems: Apple II, Atari 4/8/12, Commodore 64, TRS Color Computer
Availability: MECC; in package 'Outdoor Biology', $39
Description: Simulation. The child role plays one of four animals found in the northern United States and learns what decisions are necessary for survival; learns about food chains in the process.

ODELL LAKE (Ecology/Environment, Ages: 9-15) Systems: Apple II, Atari 4/8/12, Commodore 64, TRS Color Computer, IBM PC & Compatibles
Availability: MECC; in package 'Simulations', $55
Description: Simulation. Allows user to role-play lake fish. He/she discovers food web relationships by experimentation. Upon encountering other lake organisms, he/she must take appropriate actions to survive.

OH, DEER! (Ecology/Environment, Ages: 11-15)
System: Apple II
Availability: MECC, $49
Description: Skills practice, simulation. Based on real-life model. Challenges learner to manage herd of white-tailed deer. During a five-year period, he/she makes decisions to maintain a herd in balance with natural environment and human tolerance.

T. REX: DINOSAUR SURVIVAL ADVENTURE (Ecology/Environment, Ages: 11-18)
Systems: Apple II
Availability: D.C. Heath and Company., $75.00
Description: Skills practice, simulation. Examines the day-to-day life of Tyrannosaurus Rex and its survival needs under different environmental conditions. Includes wide range of realistic habitats, prey, and natural hazards.

AIR POLLUTION
(Ecology/Environment, Ages: 13-Adult) Systems: Apple II, TRS-80 1/3/4, IBM PC & Compatibles
Availability: Educational Materials & Equip. $37
Description: Tutorial, simulation. User explores carbon monoxide pollution in an urban environment. He/she manipulates variables affecting carbon monoxide levels, uses "worst case analysis", and determines safety levels.

WATER POLLUTION (Ecology/Environment, Ages: 13-Adult) Systems: Apple II, TRS 80 1/3/4
Availability: Educational Mat. & Equip. Co., $35
Description: Tutorial, simulation. The user explores the impact of pollution on aquatic life. He/she solves realistic problems in different water environments by varying temperature, type of waste, dumping rate, and treatment.

Science (cont)

GROUND WATER (Ecology/Environment, Ages: 15-Adult) Systems: IBM PC & Compatibles, Other
Availability: IBM, $44
Description: Tutorial, simulation. Emphasizes the importance of ground water as a source of fresh water, and explores the human and environmental factors that influence its supply and quality.

CREATIVE CONTRAPTIONS
(General Science, Ages: 7-18) Systems: Apple II, Commodore 64
Availability: Bantam Electronic Publishing, $29.95
Description: Tutorial. Designed to teach the learner about simple machine principles, cause and effect relationships, and creative problem solving.

MICKEY'S SPACE ADVENTURE (General Science, Ages: 9-12) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Walt Disney, $44.95
Description: Educational game, concept development. Mickey and Pluto help space travelers retrieve pieces of a lost "memory crystal" and in the process learn many facts and concepts about our solar system.

FRIENDLY FILES SCIENCE & NATURE
(General Science, Ages: 9-15) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Grolier Electronic Publishing, $19.95
Description: Database retrieval. Pre-written database contains thousands of fascinating and useful facts to make the learner more proficient at research and at analyzing relationships among facts. Requires Grolier's FRIENDLY FILER word processor (see COMPREHENSIVE section).

DINOSAUR DIG (Natural History, Ages: 9-14)
Systems: Apple II, IBM PC & Compatibles
Availability: Mindscape, Inc., $49.95
Description: Skills practice, educational game. Presents facts about dinosaurs and the time in which they lived. Colorful graphics of continents and dinosaurs are used. Includes keyboard overlay and a program guide.

PHYSICS GEMS
(Physics, Ages: 17-Adult) Systems: Apple II, Commodore 64, IBM PC & Compatibles
Availability: Cross Educational Software, $35
Description: Tutorial, simulation. Thirty short programs for use in learning physics and BASIC programming. Titles include: ABSOLUTE ZERO, WAVE ANALYSIS, COPY-Q, SCREEN COLORS, LEAST SQUARES, SIMPLE LENS, SPACEBAR TIMER, and more.

LIGHT WAVES
(Light and Optics, Ages: 17-Adult)
Systems: Apple II, TRS-80 1/3/4, IBM PC & Comp.
Availability: Educational Materials & Equip., $55
Description: Tutorial, simulation. Experiments verifying the wave theory of light and measuring wavelength by Young's double-slit method. Variables include: Wavelength, number of slits, slit separation and slit-to-screen distance.

RAY TRACER (Light and Optics, Ages: 17-Adult)
System: Apple II
Availability: Vernier Software, $24.95
Description: Simulation, concept demonstration. Uses hi-res graphics to illustrate the principles of geometrical optics. User can explore reflection, refraction, Snell's Law, total internal reflections, image formation with lenses and mirrors, and more.

PROJECTILES II (Motion/Force/Energy, Ages: 17-Adult) System: Apple II
Availability: Vernier Software, $24.95
Description: Simulation, concept demonstration. Allows user to experiment with projectile motion, including the effects of air resistance and wind. Launch may be from ground level or from the top of a cliff.

WAVE ADDITION II (Waves and Particles, Ages: 16-Adult) System: Apple II
Availability: Vernier Software, $24.95
Description: Simulation, concept demonstration. Graphically demonstrates the superposition of waves and various resulting phenomena such as interference, beats, the "shaping" of waves by the addition of harmonics, and Fourier synthesis.

THE KING'S RULE
(Scientific Methods & Measurement, Ages: 10-Adult) Systems: Apple II, Commodore 64, TRS-80 1/3/4, IBM PC & Compatibles, Other
Availability: Sunburst Communications, $59
Description: Educational game, concept development. Introduces the learner to the heart of scientific thinking - generating and testing hypotheses. He/she works alone or with others to discover the numerical rules that allow travel to the center of a castle.

POWER GRID (Technology Education, Ages: 12-Adult) Systems: Apple II, TRS-80 1/3/4
Availability: HRM Software, $59
Description: Educational game. Simulation of an electric utility. User operates for one day, a system consisting of ten power plants. Points are awarded in several categories of management action.

Social Sciences

STICKYBEAR TOWN BUILDER
(Map and Globe, Ages: 7-10)
Systems: Apple II, Commodore 64
Availability: Weekly Reader Family, $39.95
Description: Simulation, concept demonstration. Helps child learn map skills. He/she builds own town, complete with roads, parks, bridges, airports, etc., and learns compass-reading, directions, map-reading, and more.

JENNY'S JOURNEYS
(Map and Globe, Ages: 10-15) System: Apple II
Availability: MECC, $55
Description: Simulation. Designed to teach and reinforce map-reading skills. The child learns to use a map index, locate a place, plan a route of travel, and then drive Aunt Jenny's car through fictional Lake City.

CROSS COUNTRY USA (Map and Globe, Ages: 11-16) System: Apple II
Availability: Didatech Software Limited, $49.95
Description: Simulation. Teaches map reading skills, strategy and decision-making skills, major US commodities, and political geography. Simulates the role of a truck driver who deals first-hand with weather, sleeping, gas, food, and efficient driving.

CAMPAIGN MATH (Civics/Government, Ages: 9-18) Systems: Apple II, IBM PC & Compatibles
Availability: MindPlay, $39.99
Description: Skills practice, simulation. Designed for use in learning about the electoral process as well as in mathematics. Allows simulation of elections in school, town, or state.

Social Sciences (cont)

WHERE IN THE USA IS CARMEN SAN DIEGO?
(Geography, Ages: 11-Adult) System: Apple II
Availability: Broderbund Software, $44.95
Description: Educational game. Users becomes a detective pursuing Carmen and her gang around the United States to recover stolen treasures and learn more about the geography, economy, and history of the country.

GAME OF THE STATES
(Political Divisions, Ages: 10-18)
Systems: Apple II, IBM PC & Compatibles
Availability: Media Materials, Inc., $39.95
Description: Rote drill, educational game. Five games help user learn to recognize the states, their capitals, abbreviations, relative locations, and major cities.

REGIONS OF THE UNITED STATES (Regions/Ecosystems, Ages: 11-18) Systems: Apple II, Commodore 64, TRS-80 1/3/4
Availability: Educational Activities, Inc., $59.95
Description: Skills practice, educational game. First, learners review the states, region by region. Then they choose either a quiz that requires them only to identify the states or one that requires them to both identify the states and to spell their names.

OREGON (United States History, Ages: 9-14)
Systems: Apple II, Commodore 64, TRS-80 1/3/4
Availability: MECC; available only in package 'Elementary Volume 6-Social Studies', $39
Description: Educational game. Simulates a trip by covered wagon as it might have occurred en route from Independence, Missouri to Oregon City in 1847. Atari version in package, "Expeditions."

RAILS WEST
(United States History, Ages: 11-16)
Systems: Apple II, Atari 4/8/12, Commodore 64
Availability: Strategic Simulations Inc., $39.95
Description: Skills practice, educational game. The year is 1870. The Union Pacific and Central Pacific have met in Utah to complete the first transcontinental railroad. Gives learners the chance to experience the excitement of that period.

ACROSS THE PLAINS
(United States History, Ages: 11-Adult)
Systems: Commodore 64, Commod. Amiga
Availability: Micro-Ed, Inc., $59.95
Description: Tutorial, educational game. Provides users with information about that colorful period in American history, the westward movement. Uses a game-playing format that utilizes real places and events.

THE OREGON TRAIL (United States History, Ages: 11-18) Systems: Apple II, Other
Availability: MECC, $55
Description: Simulation, concept development. Enables the learner to relive the days of pioneers and covered wagons. He/she can take part in the great adventure of crossing the rugged landscape of 19th century America.

PRESIDENT ELECT (Political Science, Ages: 15-Adult) Systems: Apple II, Commodore 64
Availability: Strategic Simulations Inc., $39.95
Description: Simulation, educational game. One to three players participate in in the U.S. presidential campaign process. The player may use actual candidates from any 1960-1984 election or make up his/her own.

Publishers

Here are the addresses and telephone numbers of the software publishers whose products are included in the preceding section.

These companies may be contacted directly via this information, or their products may be sought through retailers in your local area. See the information in the Introduction (Section I.) regarding steps to take before ordering products.

A

Academy Software, Inc., P.O. Box 6277, San Rafael, CA 94903 Tel: (415) 499-0850

Addison-Wesley Publishing Company, Inc., Educational Media Systems Division, Reading, MA 01867 Tel: (617) 944-6795

Advanced Ideas, Inc., 2902 San Pablo Avenue, Berkeley, CA 94702 Tel: (415) 526-9100

Atari Corporation, 1196 Borregas Avenue, Sunnyvale, CA 94086 Tel: (800) 538-8547

B

Bantam Electronic Publishing, 666 Fifth Avenue, 21st Floor, New York, NY 10103 Tel: (212) 765-6500

Barrons Educational Series, 113 Crossways Park Dr., Woodbury, NY 11797 Tel: (516) 921-8750

Baudville, 1001 Medical Park Drive, S.E., Grand Rapids, MI 49506 Tel: (800) 824-8873

Blue Chip Software, 6744 Eton Avenue, Canoga Park, CA 91304 Tel: (800) 258-3244

Broderbund Software, 17 Paul Drive, San Rafael, CA 94903 Tel: (415) 479-1170

Bytes of Learning, Inc., 150 Consumers Road, Suite 202, Willowdale, Ontario M2J 1P9 Tel: (416) 495-9913

C

CAE Software, Inc., 5225 Wisconsin Avenue N.W., Suite 601, Washington, D.C. 20015 Tel: (202) 966-3686

C & C Software, 5713 Kentford Circle, Wichita, KS 67010 Tel: (316) 683-6056

Classroom Consortia Media, Inc., 57 Bay Street, Staten Island, NY 10301 Tel: (800) 237-1113

Commodore Business Machines, Inc., 1200 Wilson Drive, West Chester, PA 19380 Tel: (215) 431-9100

Communication Skill Builders, P.O. Box 42050, Tucson, AZ 85733 Tel: (602) 323-7500

Compress, A Division of Wadsworth, Inc., P.O. Box 102, Wentworth, NH 03282 Tel: (603) 764-5831

Conduit, The University of Iowa, Oakdale Campus, Iowa City, IA 52242 Tel: (319) 335-4100

Control Data Corporation, PLATO Education Marketing, HQBO2G, 8100 Thirty-fourth Avenue So., Bloomington, MN 55440 Tel: (612) 853-8174

Coronado Publishers, 1250 Sixth Avenue, San Diego, CA 92101 Tel: (619) 231-9466

Cross Educational Software, 1802 N. Trenton, P.O Box 1536, Ruston, LA 71270 Tel: (318) 255-8921

Curriculum Applications, P.O. Box 264, Arlington, MA 02174

D

Data Command, P.O. Box 548, Kankakee, IL 60901 Tel: (815) 933-7735

Data Trek, Inc., 621 Second Street, Encinitas, CA 92024 Tel: (619) 436-5055

Davidson & Associates, Inc., 3135 Kashiwa Street, Torrance, CA 90505 Tel: (213) 534-4070

Designware, Inc., 185 Berry Street, San Francisco, CA 94107 Tel: (415) 546-1866

Didatech Software Limited, 3812 William Street, Burnaby, B.C., V6C 3H9 Tel: (604) 299-4435

DLM Teaching Resources, One DLM Park, Allen, TX 75002 Tel: (800) 442-4711

E

Earthware Computer Services, P.O. Box 30039, 2386 Spring Blvd., Eugene, OR 97403 Tel: (503) 344-3383

Educational Activities, Inc., P.O. Box 392, Freeport, NY 11520 Tel: (516) 223-4666

Educational Materials & Equipment Company, P.O. Box 2805, Danbury, CT 06813 Tel: (800) 345-2050

EduSoft, P.O. Box 2560, Berkeley, CA 94702 Tel: (415) 548-2304

Eduware Services, Inc., 185 Berry Street, San Francisco, CA 94107 Tel: (415) 546-1866

Electric Transit, Inc., 501 Marin Street - Suite 116, Thousand Oaks, CA 91360 Tel: (805) 373-1960

Electronic Arts, 1820 Gateway Drive, San Mateo, CA 94404 Tel: (415) 572-2787

G

Gessler Educational Software, 900 Broadway, New York, NY 10003 (212) 673-3113

Grolier Electronic Publishing, Inc., Sherman Turnpike, Danbury, CT 06816 Tel: (800) 858-8858

H

Harcourt Brace Jovanovich, Publisher, 1250 Sixth Avenue, San Diego, CA 92101 Tel: (800) 346-8648

Hartley Courseware, 23 Bridge, Box 419, Dimondale, MI 48821 Tel: (517) 646-6458

HRM Software, 175 Tompkins Avenue, Pleasantville, NY 10570 Tel: (914) 769-7496

Human Engineered Software, 390 Swift Avenue - Suite 14, So. San Francisco, CA 94080 Tel: (415) 871-0570

I

IBM, P.O. Box 1329, Boca Raton, FL 33432 Tel: (800) 426-2468

Innovision, P.O. Box 1317, Los Altos, CA 94023

Island Software, P.O. Box 300, Lake Grove, NY 11755 Tel: (516) 585-3755

K

Kellogg's Nutri-Venture, P.O. Box 5159, Kalamazoo, MI 49003 Tel: (616) 961-2849

L

Lawrence Hall of Science, University of California, Berkeley, CA 94720 Tel: (415) 642-3167

The Learning Company, 6493 Kaiser Drive, Fremont, CA 94555 Tel: (800) 852-2255

Learning Seed Company, 21250 N. Andover Road, Kildeer, IL 60047 Tel: (312) 397-4470

Learning Well, 200 South Service Road, Roslyn Heights, NY 11577 Tel: (800) 645-6564

Looking Glass Learning Products, 865 Busse Highway, Park Ridge, IL 60068 Tel: (312) 698-0292

M

Marshware, P.O. Box 8082, Shawnee Mission, KS 66208 Tel: (800) 821-3303

McGraw-Hill Book Company - School Division, 1221 Avenue of the Americas, New York, NY 10020 Tel: (800) 654-8608

MECC-Minnesota Educational Computing Corp., 3490 Lexington Avenue No., St. Paul, MN 55126
Tel: (612) 481-3500

Media Materials, Inc., 7936 Remington Avenue, Baltimore, MD 2121 Tel: (800) 638-1010

Mentor Learning Systems, Inc., 1825 De La Cruz Blvd., Suite 10, Santa Clara, CA 95050 Tel: (800) 554-1636

Metacomet Software, P.O. Box 31337, Hartford, CT 06103 Tel: (203) 223-5911

Micro-Ed, Inc., P.O. Box 444005, Eden Prairie, MN 55344 Tel: (612) 929-2242

Milliken Publishing Company, 1100 Research Blvd., P.O. Box 21579, St. Louis, MO 63132 Tel: (800) 643-0008

Mindplay, 82 Montvale, Stoneham, MA 02180 Tel: (617) 438-5454

Mindscape, Inc., 3444 Dundee Road, Northbrook, IL 60062 Tel: (800) 221-9884

O

Odesta Corporation, 4084 Commercial Avenue, Northbrook, IL 60062 Tel: (800) 323-5423

Q

Quality Educational Designs, Inc., P.O. Box 12486, Portland, OR 97212 Tel: (503) 287-8137

R

Research Design Associates, Inc., P.O. Box 848, Stony Brook, NY 11790

S

Scholastic, Inc., 730 Broadway, New York, NY 10003 Tel: (212) 505-3000

Scott, Foresman & Company, 1900 E. Lake Avenue, Glenview, IL 60025 Tel:(212) 729-3000

Sierra On-Line, P.O. Box 485, Coarsegold, CA 93614
Tel: (800) 356-5252

Silver Burdett & Ginn, Inc., 160 Gould St., Needham, MA 02194 Tel: (617) 863-9400

Software Academy, Inc., 9574 Lamare Street, Spring Valley, CA 92077 Tel: (619) 464-2500

South-Western Publishing Company, 5101 Madison Road, Cincinnati, OH 45227 Tel: (513) 271-8811

Spectrum Holobyte, Inc., 1050 Walnut Street, Suite 325, Boulder, CO 80302 Tel: (303) 443-0191

Spinnaker Software Corporation, One Kendall Square, Cambridge, MA 02139 Tel: (800) 826-0706

Springboard Software, Inc., 7808 Creekridge Circle, Minneapolis, MN 55435 Tel: (800) 328-1223

Strategic Simulations, Inc., North Rengstorff Avenue, Mountain View, CA 94043 Tel: (415) 964-1353

Sunburst Communications, Inc., 39 Washington Avenue, Pleasantville, NY 10570 Tel: (800) 431-1934

Glossary

Compatibles —

In "IBM PC and compatibles", computer systems which will run software written for the IBM PC family of computers, i.e., the PC, the PC/jr, the PC-XT, and the PC-AT (all names trademarks of IBM).

Concept Demonstration —

The computer is used to illustrate, usually dynamically, the operation of a principle, e.g., daily compounding of interest.

Concept Development —

The learner is provided an experience designed to promote the mastering of high-order concepts and/or skills.

Database Manager —

A program which allows the user to define, store, maintain, sort, and report a body of data about the different members of a group of people, places, or things, e.g., friends' names, addresses, and telephone numbers.

Data Retrieval —

The computer is used to place at the user's disposal a large body of data about a given situation (e.g., census or election results) as a laboratory for testing alternate "hunches" to explain what is happening in the situation. e.g., why one section of the country has traditionally supported a particular political party.

Educational Game —

The computer plays, or provides computational support for, a game in which one or more users participates and in the process learns new concepts or skills.

Language Processor —

The computer is used to translate a language (e.g., BASIC, Logo) which enables a program author to more easily communicate with the computer than might be possible otherwise.

Package —

The program described is distributed only as part of a collection of programs; it usually cannot be purchased separately. The price given is for the entire package.

Rote Drill —

The computer is used to administer drills to help students learn material requiring few if any new skills, e.g., dates, arithmetic tables, etc. Immediate feedback is given.

Simulation —

The computer is used to model a real—life or imaginary situation in a dynamic fashion so that learners may interact with it and thereby learn about it. Good simulations usually embody situations which students could not experience otherwise because of financial, safety, time, or other constraints, e.g., experimenting with a body of water undergoing pollution.

Skills Practice —

The computer is used to provide exercises enabling the user to practice new skills such as factoring, conversion between metric units, musical pitch discrimination, etc. Immediate feedback is given to the student.

Spreadsheet —

A program which allows the user to work on-screen in a tabular format of rows and columns similar to that used by accountants; provides mathematical and other types of operatons among the cells of the table; good for budgeting, graphing, scheduling, etc.

Tool Program —

An application of the computer where its speed and storage capacity are used to do jobs which would consume much time if done manually (e.g., statistical calculations) and thereby free up the user to concentrate on the over—all task at hand.

Tutorial —

The computer is used to present new material which the learner has not worked with before. Most tutorials also contain skills practice or rote drill components.

Word Processor —

The computer is used to edit and reformat blocks of text such as stories, reports, or letters. It has the tremendous advantage of enabling extensive rework of a document with only one entry of the original material. Therefore, it offers great potential for use by all learners, and especially those for whom the act of writing is difficult.

YOUR DECISIONS ARE ONLY AS GOOD AS YOUR INFORMATION